

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1.- 7. are cancelled.

8. (Currently Amended) A semiconductor substrate support, comprising:
a chuck including an outer membrane, the chuck configured to change between a compliant state and a rigid state, wherein a semi-conductive polymer material is disposed on an outer surface of the outer membrane; and
an electromagnetic field source configured to apply an electromagnetic field to the chuck, the electromagnetic field causing the chuck to change from the compliant state to the rigid state.

9. (Original) The support of claim 8, further comprising:
a channel extending through the chuck.

10. (Currently Amended) The support of claim 8, wherein the chuck further includes,
~~an outer membrane; and~~
a fluid defined within the outer membrane.

11. (Original) The support of claim 10, wherein the fluid is a magnetorheological fluid.

12. (Cancelled)

13. (Currently Amended) The support of claim ~~12~~ 8, wherein the semi-conductive polymer material acts as an electrostatic chuck.

14. (Original) The support of claim 9, wherein the channel is a vacuum channel.

15. (Currently Amended) A planarization module, comprising:

a rotatable semiconductor substrate support configured to support a substrate, the substrate support configured to alternate between a compliant state and a rigid state, wherein the substrate support includes an outer membrane having a polymer configured to change compliance in response to an electromagnetic field being applied to the substrate support;

a rotatable planarizing surface disposed over the substrate support; and
an electromagnetic field source configured to apply ~~an~~ the electromagnetic field proximate to the substrate support.

16. (Original) The planarization module of claim 15, further comprising:

a vacuum source configured to supply vacuum to a channel defined through the substrate support.

17. (Currently Amended) The planarization module of claim 15, wherein ~~the substrate support includes,~~

an a fluid is defined within the outer membrane ~~having a fluid defined therein,~~
the fluid configured to change viscosity in response to the electromagnetic field being applied to the substrate support.
18. (Original) The planarization module of claim 15, wherein the rotatable planarizing surface is a grinding wheel.
19. (Original) The planarization module of claim 15, wherein the rotatable planarizing surface is configured to orient the substrate in the substrate support while the substrate support is in the compliant state.
20. (Original) The planarization module of claim 17, wherein the fluid is a suspension that includes one of a magnetic and a magnetorheological material.
21. (Cancelled)
22. (Currently Amended) The planarization module of claim ~~21~~ 15, wherein the polymer is a matrix that includes one of a magnetic and a magnetorheological material.
23. (Currently Amended) A semiconductor substrate support, comprising:

a chuck having ~~[[a]]~~an outer membrane that is filled with a magnetorheological fluid and a surface of the membrane configured to receive a

semiconductor substrate, wherein the magnetorheological fluid is configured to change between a compliant state and a rigid state, wherein a semi-conductive polymer material is disposed over the outer membrane; and

an electromagnetic field source configured to apply an electromagnetic field to the chuck, the electromagnetic field causing the magnetorheological fluid to change from the compliant state to the rigid state.